

SIMEONOV, S.

Biochemic batteries. Fiz mat spisanie BAN 5 no.3:224  
'62.

SIMEONOV, S.

The 5000-ton freighter. Mashinostroene 11 no.7/8:38-39 J1-Ag '62.

-- BULGARIA/Physical Chemistry - Solutions. Theory of Acids and Bases. B.

Abs Jour : Ref Zhur - Khimiya, No 9, 1958, 28021

Author : Simova, P.D. and Simeonov, S.D.

Inst : Bulgarian Academy of Sciences.

Title : Investigation of the Dissolution Process and of the  
Structure of Solutions by Light-Scattering Effects.

Orig Pub : Izvest Bulgar Akad Nauk, Otdel fiz-metern i tekhn nauki,  
Ser fiz, 6, 423-433 (1957) (in Bulgarian with summaries  
in German and Russian)

Abstract : In continuation of previous work (P.D. Simova, Izvest  
Bulgar Akad Nauk, Ser fiz, 3, 3 (1952) aqueous solutions  
of formic acid have been investigated by the light-scat-  
tering (LS) method and by the depolarization of scattered  
light. Curves are given showing the change in intensity  
of the scattered light as a function of the time elapsed

Card 1/2

14

SIMEONOV, S. *Ando*

Some questions on the durability of paved-road surfaces in Bulgaria.

p. 18 (STROITELSTVO) Vol. 4, no. 7, 1957,  
Sofia, Bulgaria

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 3,  
March 1958

Handwritten: *Handwritten*

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BULGARIA / Chemical Technology, Chemical Products and H  
Their Applications. Binding Substances. Concrete  
and Other Silicate Building Materials.

Abs Jour: Ref Zhur-Khimiya, 1959, No 4, 12676.

Author : Simeonov, Stancho.

Inst : Not given.

Title : Use of Local Materials as Additives in Asphalt  
Concrete Road Covers.

Orig Pub: Komun. stopanstvo, 1958, No 1, 25-30.

Abstract: Asphalt concrete covers on a base of sand showed  
satisfactory results. The best proved to be a  
composition of 85% sand, 15% crushed stone and 9.6  
parts bitumen per 100 parts of mineral. -- Ye.  
Stefanovskiy.

Card 1/1

SOMLEV, P., inzh.; ~~VOLEV~~, A.; TERZIISKI, Iv.; ~~SIMONOV~~, St.; POPOV, D.

Discontinuation and redistribution of the obsolete lathes  
S5A and S8. Mashinostroene 11 no.5:3-5 My '62.

1. Postoianen konsultant, "Mashinostroene" (for Somlev).

SIMEONOV, S.

A new passenger ship. Mashinostroene 12 no.7:35 J1 '63.

SHISHMANOV, S.

The Shishmanov Val I and the Stanevo floating pumping  
stations. Mashinostroene 12 no.8:36 Ag '63.

ADAMOV, IV.; SHIMONOV, S.

On the clinical-roentgenologic picture of acquired toxoplasmosis.  
Dokl. sr. vissh. med. inst. Sofia 43 no.3:45-51 '64.

1. Chair of Infectious and Parasitology (Director: prof.  
A. Dimitrova); Chair of Preventive Medicine (Director: prof.  
Dr. Yankov) Higher Medical Institute, Sofia.

SIMEONOV, Simeon, dots

A process of successive approximations, and its application  
in solving functional equations with nonlinear operators  
of a monotonic type. Godisznik Inzh stroit inst 14 no.1:  
9-21 '62. [publ. '63]

SIMEONOV, S.

Hundredth year of the birth of Academician A. N. Krylov,  
great Russian ship constructor. Tekh delo 501: 4, 30 N '63.

STERNOV, Simeon A.

On some clinical problems in toxoplasmosis in Bulgaria.  
Med. gals. 12 no.8/9:189-190 Ag-S '65.

1. Interna propedeuticka klinika u Sofiji, Visoki medicinski  
institut (upravnik: prof. dr. Iv. Jonkov).

SIMEONOV, Simeon D.

Flight of the vertebrate animals. Prir i znanie 12 no.7:4-7 S '59.  
(ERAI 9:10)

(Flight) (Vertebrates)

SIMEONOV, Simeon D.

Bombycilla. Prir i znanie 12 no.10:14-15 D '59.  
(Bombycilla garrulus)

(EEAI 9:10)

ZAKHARIEV, K.; SIMEONOV, S.

An unusual case of ornithosis. Suvrem. med., Sofia 11 no. 2-3:174-178 '60.

1. Iz Terapevtichvoto otdelenie na III gr. ob. b-na, Sofia.  
(ORNITHOSIS case reports)

SIMEONOV, Simeon D.

Along the valley of the Amazon River. Prir i znanie 13 no.6:12-14  
Je '60. (EEAI 10:1)

(Brazil--Rivers) (Amazon River)

WILLIAM, Simon J.

13

SIMEONOV, Simeon D. [Simeonov, Simeon D.]

Food of wood owls (*Strix aluco* L.) in Lozenska Planina.  
Izdaniya Prirnauc muzeja Skopje 9 no. 3:35-50 '63.

1. Zoological Institute of the State University, Sofia.

SIMEONOV, S. D.; BAUMGART, V.

Methods of studying the food of diurnal rapacious birds and  
owls. Priroda Bulg 12 no. 5: 95-98 S-0 '63.

MAKONOV, Simon

Protective devices in birds. Prir i znani 16 no.2:11-12 P  
163.

SIMEONOV, S.

Materials on the food of the long-eared owl in some parts of Bulgaria (Asio otus L.). Godishnik biol 57 no.1:107-116 '62-'63 [publ. '64].

A new habitat of *Cricetulus migratorius* Pall. in Bulgaria. Ibid.:117-120

1. Chair of Vertebrate Zoology of the Faculty of Biology, Geography, and Geology of the University of Sofia, Sofia (Head of the Chair: [dots,] Peshev, TS.).

PEŠEV, Ts. Ts. , NIMONOV, S.

Vertebrates species in the environs of the village of Parash,  
Iratza District. Godishnik biol 57 no.1:81-91 '62-'63 [publ.  
'64]

Chair of Vertebrate Zoology of the Faculty of Biology,  
Geography, and Geology of the University of Sofia, Sofia  
Head of the Chair. [dots.] Peshev, Ts.).

1961-1962.

Studies of the food of domestic sparrows (*Passer domesticus* L.)  
in the Sofia region. *Godishnik biol* 56 no.1:237-275 '61-'62  
(publ. '64).

1. Chair of Vertebrata Zoology of the Faculty of Biology,  
Geography, and Geology of the University of Sofia, Sofia  
(Head of the Chair: [dots] TB.Peshev).

L 37022-66 IJP(c)

ACC NR: AP6027070

SOURCE CODE: BU/0012/65/008/003/0230/0231

AUTHOR: Simeonov, S.

47

ORG: none

B

TITLE: First Bulgarian National Conference on Spectroscopy

SOURCE: Fiziko-matematicheskoe spisanie, v. 8, no. 3, 1965, 230-231

TOPIC TAGS: physics laboratory, physics laboratory instrument, electron paramagnetic resonance, physics conference, atomic spectroscopy, molecular spectroscopy, IR spectroscopy, UV spectroscopy, spectrum analysis, magnetic resonance

ABSTRACT: The First Bulgarian National Conference on Spectroscopy was held on 14, 15, and 16 June 1965 in Plovdiv under the auspices of the Commission on Spectroscopy of the Bulgarian Academy of Sciences, the Committee for Science and Technological Progress, the Institute for Nonferrous Metallurgy, and the Kombinat for Nonferrous Metals in Plovdiv. The meeting was attended by 78 participants, and 40 contributed papers covered problems of atomic and molecular spectral analysis, the infrared and ultraviolet spectroscopy, magnetic and electronic paramagnetic resonance, the design of spectroscopic devices, and the organization and economical operation of modern industrial spectroscopic laboratories. The next national conference will be held in September of 1966 in the town of Ruse, while the third conference will extend invitations to foreign scientists as well. The proceedings of the Conference will be published as a separate publication.

[JPRS: 36,465]

SUB CODE: 20 / SUBM DATE: none

Card 1/1

ACC NR: AP6029580

SOURCE CODE: YU/0015/65/000/08-/0189/0190

AUTHOR: Simeonov, Simeon Asenov (Doctor) 25B

ORG: Internal Propaedeutics Clinic, Medical College/headed by Professor, Doctor  
Iv. Jonkov/, Sofia

TITLE: Some clinical aspects of toxoplasmosis in Bulgaria

SOURCE: Medicinski glasnik, no. 8-9, 1965, 189-190

TOPIC TAGS: clinical medicine, diagnostic medicine, parasitology, internal medicine

ABSTRACT: Data on 24 patients aged 19 to 81, seen 1962-1964: course, symptoms and diagnostic findings; serologic data esp. complement-fixation test results; skin allergy test results. Conclusion that visceral toxoplasmosis is present in Bulgaria. [JPRS: 36,599]

SUB CODE: 06 / SUBM DATE: none / SOV REF: 007 / OTH REF: 014

Card 1/1

ACC NR: AT6012412

SOURCE CODE: UR/0000/65/000/000/0329/0333

AUTHORS: Nikonorova, A. I.; Simeonov, S. L.; Karabasova, L. V.; Dubovaya, G. V.; Soboleva, N. P.

ORG: none

TITLE: Coefficient of linear expansion of industrial titanium

SOURCE: Soveshchaniye po metallokhimii, metallovedeniyu i primeneniyu titana i yego splavov, 6th. Novyye issledovaniya titanovykh splavov (New research on titanium alloys); trudy soveshchaniya, Moscow, Izd-vo Nauka, 1965, 329-333

TOPIC TAGS: expansion coefficient, titanium alloy, metal property / VTl-1 titanium alloy

ABSTRACT: To determine the cause of the large scatter ( $\Delta\alpha \approx \pm 1.85$ ) of the coefficient of linear expansion of titanium alloys, the expansion coefficient and texture of the corresponding metal were investigated on VTl-1 specimens. The coefficient of linear expansion was measured over the temperature interval of 20--120C with a dilatometer, while the texture was determined by the x-ray method. The coefficient of linear expansion was significantly affected by the texture, with three types of texture definable with certain values of the expansion coefficient: 1010 small-grained texture corresponded to  $(9.3--10.3) \times 10^{-6}$  1/degree; no definable texture corresponded to  $(8.5--9.2) \times 10^{-6}$ ; and 0001 large-grained

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ACC NR: AT6012412

texture corresponded to  $(7.3--8.4) \times 10^{-6}$  1/degree. It was found that repeated forging or drawing (40% deformation for cold working, 60--80% deformation with intermediate tempering at 600C) would provide a fairly uniform texture with a coefficient of linear expansion of  $8.5 \pm 0.5 \times 10^{-6}$  1/degree. Orig. art. has: 9 figures and 1 table.

SUB CODE: 11, 13/

SUBM DATE: 02Dec65/

ORIG REF: 001/

OTH REF: 003

Card 2/2

SAISON, T. L. L. STRENGTH, L. L.

1. The effect of the external force on the cutting speed of a  
1. The effect of the external force on the cutting speed of a  
1. The effect of the external force on the cutting speed of a

1. ECON. ... 3 (1981)

... in the ... of ... (1981)

SIMEONOV, S.V.

General theory of the design of ship covers. Trudy LKI no.26:  
165-177 '59. (MIRA 14:9)

1. Kafedra stroitel'noy mekhaniki korablya Leningradskogo  
korablestroitel'nogo instituta.  
(Shipbuilding)

S/020/61/138/005/003/025  
C111/C222

25304

16.310 J

AUTHOR: Simeonov, S.V.

TITLE: A process of consecutive approximations and its use in solving functional equations with non-linear operators of monotone type

PERIODICAL: Akademi nauk SSSR. Doklady. v.138. no.5, 1961, 1033-1034

TEXT: The author shows that the functional equation

$$x = Ax, \quad (1)$$

where A is a non-linear operator of monotone type which transfers a given semiordered Banach space into itself, can be solved by a successive approximation with the aid of the relation

$$x_1 = x_{1-1} + \alpha(x_{1-1}, Ax_{1-1}). \quad (2)$$

A is called monotonely ascending (descending) if for two elements  $x_1 < x_2 \in X$  it holds  $Ax_1 < Ax_2$  (resp.  $Ax_1 > Ax_2$ ). The element  $x \in X$  is called positive if all its components are positive.

Theorem 1: Let X -- semiordered Banach space. Ax -- monotone operation transferring X into itself; let exist the first derivative  $A'x \in X$  in

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A process of consecutive approximations... S/020/61/138/005/003/025  
C111/C222

the sense of Frechet. For ascending operators let besides  $A^*x > I$  or  $A^*x < I$ , where  $I$  -- identical operator in  $X$ . If under these conditions there exists an element  $x^*$  so that  $Ax^* = x^*$  then this element is unique and is bounded by the elements  $x_1, x_2 \in X$  for which  $Ax_1 - x_1$  and  $Ax_2 - x_2$

have different signs.

Theorem 2: Let (1) be given in the semiordered space  $C$  with a Chebyshev metric; let  $A$  be an operator of monotone type and let it admit a first derivative according to Frechet; let  $mI \leq A^*x \leq MI$  for every  $x \in C$  which according to theorem 1 is bounded by the elements  $x_1, x_2$ . Then for all

$m, M$  for descending, and for  $m > 1, M < 1$  for ascending operators there exists a solution  $x^*$  of (1). To it there converge the successive approximations (2) if we put  $\alpha = \frac{1}{M_{mit}-1}$ , where  $M_{mit} = \frac{1}{2}(M+m)$ . The

velocity of convergence can be approximated by the inequality

$$\|x^* - x_n\| \leq \frac{1}{1 - \frac{1}{2} \frac{n}{M+m-2}} \eta_0,$$

where  $\eta_0 \geq \|x_1 - x_0\|$ ,  $\frac{1}{2} = \frac{M-m}{M+m-2}$ .

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A process of consecutive approximations. S/020/61/138/005/003/025  
C111/C222

Theorem 3: Let (1) be given in the semiordered Hilbert space  $L_2$ , let  $A$  be continuous and monotonely decreasing. Then there exists a solution  $x^*$  of (1). To it there converge the successive approximations (2) if we put  $\alpha = -\frac{1}{1+K^2}$ , where  $K$  is the Lipschitz constant of  $A$  for the elements of the interval which contains  $x^*$ . The velocity of convergence can be estimated by the inequalities

$$x^q = x_n \left( 1 + \frac{p \cdot n}{1 - p} \right) \cdot c'$$

where  $\gamma_0 \geq \|x_1 - x_0\|$ ,  $\rho = \sqrt{1 - \epsilon}$ .

There are 3 Soviet-bloc references.

ASSOCIATION: Inzhenerno-stroitel'nyy institut Sofiya, Bolgariya  
(Institute of Civil Engineers, Sofia, Bulgaria)

PRESENTED: February 1, 1961, by A.N. Kolmogorov, Academician

SUBMITTED: July 11, 1960

Card 3/3

S/020/63/148/003/008/051  
B112/B186

11.5.80

AUTHOR: Simeonov, S. V.

TITLE: On the application of a consecutive approximation process  
to solving certain types of functional equations

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 148, no. 3, 1963, 534-537

TEXT: Functional equations  $Ax=0$  are considered whose operator  $A$  is given monotonically in a semi-ordered space  $M_T$  and is differentiable according to Frechet in such manner that  $mI \leq A'(x) \leq MI$  ( $m > 0$ ;  $x \in M_T$ ). It is shown that the approximations  $x_{n+1} = x_n - \alpha Ax_n$  ( $0 < \alpha \leq 2/M$ ) converge towards a uniquely determined solution  $x^*$ . This theorem is applied to the approximate solution of certain types of integral equations and to systems of non-linear equations.

ASSOCIATION: Inzhenerno-stroitel'nyy institut, Sofiya, Bolgariya  
(Construction Engineering Institute, Sofia, Bulgaria)

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SOV/124-58 5-5747D

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 5, p 118 (USSR)

AUTHOR: Simeonov S. V.

TITLE: Calculation of Flexible Plates Stiffened by Elastic Ribs (Raschet gibkikh plastin, podkreplennykh uprugimi rebrami)

ABSTRACT: Bibliographic entry on the author's dissertation for the degree of Candidate of Technical Sciences, presented to the Leningr. korablestroit. in-t (Leningrad Institute of Shipbuilding), Leningrad, 1957

ASSOCIATION: Leningr. korablestroit. in-t (Leningrad Institute of Shipbuilding), Leningrad

1 Structures--Mathematical analysis

Card 1/1

SIMONOV, S.V. (Sofiya, Bolgariya)

Some method of solution of nonlinear problems of the mechanics  
of a deformed body. Prikl. mat. i mekh. 28 no.3:418-429 My-Je'64  
(MIRA 17:7)

SINCHONOV, TS.

Effect of the automobile mechanism on the consumption of motor fuel. p. 21.

Vol. 4, no. 2, Feb. 1955

TEKHNIKA

Sofiya, Bulgaria

cc: Eastern European Accession Vol. 5 No. 4 April 1956

Slide 07, T.S.

"Repairing machine parts by metalization."

p. 33 (Tezhka Promishlenost) Vol. 6, no. 9, Sept. 1957. Sofia, Bulgaria

SI: Monthly Index of East European Accessions (EMAI) LC, Vol. 7, no. 5, May 1958

SIMEONOV, Ts., inzh.

Repair of machine parts by metallization. Tekhnika Bulg 3 no.2:  
16-20 F '54.

SIMEONOV, Tsv.

Certain tick-borne diseases in Bulgaria. Suvrem.med., Sofia 6  
no.4:27-33 '55.

1. Iz Vutreshnata klinika pri Visshia med. institut I.P.Pavlov-  
Plovdiv (sav.: prof. M. Rashev)

(TICKS,  
tick-borne dis. in Bulgaria)

RASHEV, M. prof.: SIMONOV, Tav.

Marseilles fever with severe reno-hepatic complications. Suvrem.  
med., Sofia 6 no.4:85-89 '55.

1. Iz Vutreshnata klinika pri Visshia meditsinski institut I.P.  
Pavlov. Plovdiv (zav.: prof. M. Pashev)  
(ROCKY MOUNTAIN SPOTTED FEVER, pathology  
kidneys & liver)  
(KIDNEYS, in various diseases,  
Rocky Mountain spotted fever)  
(LIVER, in various diseases,  
Rocky Mountain spotted fever)

RASHEV, M. professor; SIMEONOV, Ts.; TASHKIV, T.

Traumatic heart block with neurogenic pathogenesis. Suvrem.  
med. Sofia no.6:89-93 '55.

1. Iz fakultetskata vutreshna klinika (dir.: prof. M. Rashev)  
i Nervno-psikhiatrichnata klinika (dir.: prof. K. Cholakov)  
pri Visshia meditsinski institut I.P.Pavlov, Plovdiv.  
(HEART BLOCK, etiology and pathogenesis,  
traum, neurogenic pathogen.)

RASHEV, M. prof. SIMEONOV, Tsv.

Infantilism following cranial injuries. Suvrem.med., Sofia no.6:  
100-104 '55.

1. Iz Vutreshnata klinika pri Visshia meditsinski institut  
I.P. Pavlov, Plovdiv (zav.: Prof. M. Rashev).

(HEAD, wounds and injuries,  
post-traum.infantilism)

(INFANTILISM, etiology and pathogenesis,  
head inj.

(WOUNDS AND INJURIES,  
head, post-traum.infantilism)

SIMONOV, Tsv.; STOIKOV, St.

Percutaneous acute poisoning with nicotinic sulfate. Suvrem.med.,  
Sofia 6 no.9:99-102 1955.

1. Iz Fakultetskata vutreshna klinika pri Visshia meditsinski  
institut I.P.Pavlov-Plovdiv (sav. katedrata: prof. M.Rashev)

(NICOTINIC,

sulfate, pois. (Bul))

(POISONING,

nicotine sulfate (Bul))

SIMEONOV, Ts.

Hepatonephritis with boutonneuse fever followed by death. In French with Russian summary. p. 65.

DOKLADY, Vol. 8, No. 2, Apr./June 1955, Sofiya, Bulgaria.

SO: East European Accessions List, Lib. of Cong., Vol. 5, No. 10, Oct. 1956.

RASHEV, Mikhail; SIMEONOV, Tsviatko

Relation between multiple myeloma (Rusticki-Keller disease) & metastatic bone marrow cancer based on 2 personal case reports. Izv. Mikrob. inst., Sofia no.8:131-142 1957.

1. Katedra po fakultetska butreshna klinika (zav.: prof. M. Rashev)  
pri visshia meditsinski institut, I. P. Pavlov v plovdiv.

(MYELOMA, PLASMA CELL, differ. diag.  
bone marrow cancer metastases (Bul))

(BONE MARROW, neoplasms  
metastatic, differentiation from plasma cell myeloma (Bul))

SIMEONOV, TSV.

On the problem of the so-called "eosinophilic" pleurisy. Suvrem.  
med., Sofia no.9/10:180-185 '59.

1. Iz Katedrata po fakultetska terapiia pri VMI "I.P. Pavlov" -  
Plovdiv. Zav.katedrata: prof. B. Iurukov.  
(LOEFFLER'S SYNDROME)

STREKOVA, I.

"Reconciliatory action." p. 3,  
(ZDRAVEN FRONT, No. 16, Nov. 1954, Sofiya, Bulgaria)

SO: Monthly List of East European Accessions, (ELAL), LC, Vol. 4  
No. 5, May 1955, Uncl.

POPOVA-KIPROVA, Tsv.; SIMONOVA, Iv.

Certain deviations from the classical course in aphthous stomatitis. *Suvrem.med.*, Sofia 6 no.5:58-66 1955.

1. Iz Nauchno-izsledovatel'skii institut po pediatrii (direktor dots. As. Fikov)  
(STOMATITIS, APHTHOUS,  
atypical course]

SOV/120-59-1-5/17

AUTHORS: Lozinskiy, M.G., Doctor of Technical Sciences and  
Simecnova, I.S., Engineer

TITLE: Certain Relations Governing the Deformation of Technical  
Iron During Cyclic Temperature Fluctuations (Nekotoryye  
zakonomernosti deformatsii tekhnicheskogo zheleza pri  
tsiklicheskih kolebaniyakh temperatury)

PERIODICAL: Metallovedeniye i Termicheskaya Obrabotka Metallov,  
1959, Nr 1, pp 15 - 19 + 4 plates (USSR)

ABSTRACT: Investigations by the authors of the relations governing  
the deformation of commercial iron (0.03% C) under  
tension and presence of a temperature gradient in the  
longitudinal direction of the specimen revealed that a  
"super-high plasticity takes place" which is characterised  
by the formation of two necks on the specimen and by the  
occurrence of a rapid sliding deformation. Prior to the  
experiments, the specimens were annealed for two hours  
at 1 000 °C in vacuum. During the experiments, the  
specimens were heated by passing through them a low-  
voltage AC, so that a temperature gradient was produced  
in these specimens with a peak temperature at the centre.  
The temperature distribution in the specimen is graphed  
in Figure 1 for peak heating temperatures of 800 and

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Certain Relations Governing the Deformation of Technical Iron  
During Cyclic Temperature Fluctuations

1000 °C, respectively; in each specimen, a range of temperatures was generated, varying from about 400 °C at the edges and 1 000 °C in the centre. The characteristic of the cyclic change of the specimen temperature is graphed in Figure 2; each cycle was of 60 sec duration and consisted of heating to 800 °C and holding it for 2 sec at that temperature, then heating it to 1 000 °C and again holding it for 2 sec at that temperature, followed by cooling to 800 °C. In Figure 4 (plate), 8 microphotographs are reproduced of the surface of the central zone of the iron during the tensile tests and during isothermal holding at 1 000 °C. In Figure 5, 10 microphotographs are reproduced of the surface of the central zone of the specimen during tensile tests ( $\sigma = 0.33 \text{ kg/mm}^2$ ) and cyclic temperature fluctuations of 800 °C and 1 000 °C. In Figure 6, microphotographs are reproduced of the surface of the neck zone during cyclic temperature fluctuations. In Figure 8, photographs are reproduced of the specimens prior to the tests and after various test cycles. The deformation of the central

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Certain Relations Governing the Deformation of Technical Iron  
During Cyclic Temperature Fluctuations

zone of the neck during tensile stresses and cyclic temperature fluctuations between 800 and 1 000 °C in the central zone are graphed in Figure 7. In Figure 9, the dependence of the change in the distance between the centre of the neck and the edge on the maximum temperature in the centre during cyclic tests.

The following conclusions are arrived at: 1) under certain conditions of cyclic heating and cooling, a sharp decrease in the resistance to deformation in tensile loading is observed which leads to the formation of two necks; the two necks are located in zones with the temperatures 720 ~ 850 °C; 2) appearance of failure foci in sections with a temperature lower than in the middle part of the specimen is attributed to the influence of non-uniform distribution of carbon inside the grain and also to the carbon concentration outside the boundaries of the grains and the blocks. In the case of local heating and cooling of individual zones in the specimen up to the temperatures of polymorphous  $\alpha \rightarrow \gamma$  transformation, the proceeding reconstruction of the

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Certain Relations Governing the Deformation of Technical Iron  
During Cyclic Temperature Fluctuations

crystal lattice disturbs the coherent bonds of the atoms and this will result in a sharp drop in the resistance to deformation only in those parts of the grain which are enriched with carbon; 3) if the holding time at the limit temperature values is increased, this detected phenomenon is no longer observed. There are 9 figures and 6 references, 4 of which are Soviet, 1 Czech and 1 German.

ASSOCIATION: Institut mashinovedeniya AN SSSR (Institute of  
Mechanical Engineering of the Ac.Sc.USSR)

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/8.8200

SOV/180-59-6-5/31

AUTHORS: Lozinskiy, M.G., Simeonova, I.S., and Fedorovskiy, A.Ye.  
(Moscow)

TITLE: On the Behaviour of Pure and Commercial-Grade Iron<sup>1</sup>  
during Deformation under the Conditions of Cyclic  
Temperature Fluctuations

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh  
nauk, Metallurgiya i toplivo, 1959, Nr 6: pp 24-36 (USSR)

ABSTRACT: The object of the present investigation, carried out at  
the Institute of the Science of Machines, Ac.Sc. USSR, was  
to study the effect of cyclic temperature fluctuations on  
the kinetics of the deformation of commercial-grade iron  
(containing 0.03% C) and high purity material (containing  
0.002% C) stressed in tension, with the view of deter-  
mining the effect of small alloying additions on the  
character of the deformation of specimens under these  
conditions. The experiments were conducted in vacuum,  
the tensile test pieces being heated by low voltage, high  
current resistance heating. The shape of the test pieces  
of square cross-section area (3 x 3 mm), with one of the  
sides polished for metallographic examination, is  
illustrated in Fig 1a, showing the flexible bars (details  
2 and 3) supplying the power, terminal screws

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On the Behaviour of Pure and Commercial-Grade Iron during  
Deformation under the Conditions of Cyclic Temperature Fluctuations

(details 4 and 5), and the swivel-type grips (details 6 and 7). Since a larger quantity of heat was conducted away from the ends of the test pieces, and since their cross-section area was larger than that of the gauge length, a temperature gradient was set up in the test pieces; this temperature gradient, in specimens with the maximum temperature of 800 and 1000 °C, is illustrated in Fig 16, where the temperature (°C, horizontal axis) is plotted against the distance (mm) from the centre of the test piece. The temperature of the centre of the specimen was made to fluctuate between 800 and 1000 °C. The circuit diagram of the automatic temperature controller and automatic recorder of the number of the cyclic temperature changes is shown in Figs 2 and 3; Fig 2 also shows the arrangement of the test piece in the vacuum chamber, and a metallurgical microscope, mounted in the lid of the vacuum chamber, and used to study the structural changes taking place in the test pieces during the experiments. The first significant fact observed was that "necking" of the commercial-grade iron

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On the Behaviour of Pure and Commercial-Grade Iron during  
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specimens occurred not in the centre of the test piece, but at two points situated symmetrically on both sides of the "hot zone" (about 10 mm from the centre), where the temperature fluctuated between 750 and 850 °C. (Two necks were formed when the time at the lower and higher temperatures did not exceed 60 sec; when the test piece was held at the temperature for longer periods, only one neck in the centre of the specimen of the test piece was formed). This, apparently anomalous, effect was attributed to several factors. While the overall carbon content of the investigated material was 0.03%, the local carbon concentration, particularly at the grain and block boundaries, could be considerably higher. Bearing in mind that the temperature of the  $\alpha \rightarrow \gamma$  transformation changes from 910 to 721 °C when the carbon content varies from 0 to 0.83%, it will be seen that the C-rich, grain-boundary regions in the central part of the tensile test piece whose temperature fluctuated between 800 and 1000°C remained in the  $\gamma$ -iron range throughout the experiment, while in the interior of the grains (blocks), each

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temperature fluctuation was accompanied by the  $\alpha \rightarrow \gamma$  (heating) or  $\gamma \rightarrow \alpha$  (cooling) transformation. The situation in the parts of the specimens, where the temperature fluctuated between 750 and 850 °C, was quite different; here, the interior of the grains retained their  $\alpha$ -iron structure throughout the experiment, while the grain-boundary regions were undergoing the  $\alpha \rightarrow \gamma$  and  $\gamma \rightarrow \alpha$  transformations. The strength of the  $\gamma$ -phase is considerably higher than that of the  $\alpha$ -phase, and this fact accounts for the high resistance to deformation of the central (hot) part of the test pieces where the grain boundaries retained their  $\gamma$ -phase structure throughout the duration of each test. Regarding the regions of "critical" temperatures, where necking occurred, it should be remembered that the mechanical properties of iron are adversely affected by the  $\gamma \rightleftharpoons \alpha$  transformation, which is accompanied by a partial loss of the coherent bond between the atoms and by volumetric changes which set up internal stresses in the microvolumes of the material undergoing the

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transformation; it was for this reason that applied stresses as low as 0.33-0.55 kg/mm<sup>2</sup> were sufficient to cause deformation (necking) in those parts of the test piece in which the carbon-rich grain boundaries were continuously undergoing the  $\alpha \rightleftharpoons \gamma$  transformation. This view was confirmed by the fact that, when specimens of high purity iron were tested under the same condition, one neck only was formed in the centre of the test piece (the table on p 28 gives the chemical analysis of the commercial grade (top line) and high purity (bottom line) experimental materials). The process of deformation of commercial-grade iron, subjected to cyclic temperature fluctuations between 750 and 950 °C (the time taken to heat the test piece from the lower to the upper limit of temperature being 10 sec, and the time at the temperature 2 sec), while under an applied tensile stress of 0.33 kg/mm<sup>2</sup>, is illustrated in Fig 5, where the lower curve shows the variation of the temperature (°C, right-hand scale) and the upper curve the variation of elongation ( $\epsilon$ , %, left-hand scale) with time (sec).

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It will be seen that an anomalous increase in the length of the test pieces was observed during cooling through the 800-730 °C temperature range, and that the rate of deformation during heating was highest in the same temperature range. The structural changes occurring in commercial grade iron during the experiments are illustrated by a series of microphotographs (X 204), reproduced in Fig 6, and showing the appearance of the polished surface of the specimen in the region of necking; the temperature of this region fluctuated between 750 and 850 °C, the duration of the heating and cooling cycles being 20 and 12 sec, respectively, and the time at the temperature, 2 sec; the test piece was under a tensile stress of 0.55 kg/mm<sup>2</sup>. Fig 6a shows the surface of the test piece before the test; the direction of the applied stress is shown by arrows; the impressions, made by the diamond pyramid used in micro-hardness tests, assisted in assessing the magnitude and character of the localized deformation taking place during the experiments. Fig 6b shows the surface of the

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On the Behaviour of Pure and Commercial-Grade Iron during Deformation under the Conditions of Cyclic Temperature Fluctuations

test piece after 5 min at 1000 °C; faint outlines of the grain boundaries of the  $\alpha$ -phase are visible. Figs 6b - 6e show the surface of the test piece after 5, 10, 20 and 50 heating/cooling cycles, respectively, and attention is drawn to the formation of cracks in the regions indicated by arrows in Figs 6d and e. The course of deformation of high purity iron, tested under the same conditions as the commercial grade material (except for the stress which, in this case was 0.05 kg/mm<sup>2</sup>), is illustrated by the microphotographs reproduced in Fig 7, which show the surface of the central (necking) part of the test piece, the temperature of which fluctuated between 800 and 1000 °C. Fig 7a shows the surface of the test piece before the experiments; the appearance of the same surface area, after 5 min at 1000 °C, and after 5, 10, 20 and 50 heating/cooling cycles is illustrated by the subsequent micrographs: the increasing degree of fragmentation of the grains with increasing number of the temperature fluctuations should be noted. The difference in the behaviour of the investigated materials is also

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On the Behaviour of Pure and Commercial-Grade Iron during  
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illustrated by the graph reproduced in Fig 8, where the elongation of the test piece ( $\epsilon$ , %) is plotted against the number,  $n$ , of the temperature fluctuations for the commercial grade iron extended under  $0.55 \text{ kg/mm}^2$  (curve 1) and high purity iron extended under  $0.05 \text{ kg/mm}^2$  (curve 2). It will be seen that after 50 cycles, the total elongation of the high purity and commercial grade iron was 13 and 38%, respectively, although the stress applied in the latter case was eleven times higher than that in the former. Another interesting fact observed by the present authors was the formation and growth of conically shaped protrusions on the surface of high purity iron in the central (hottest) part of the test pieces. The appearance of the commercial grade and high purity iron test pieces after 150 temperature fluctuations ( $800-1000^\circ\text{C}$ ) is shown in Figs 9a and 9b, respectively (the arrows showing the necking zones); the necking zone of the test piece shown in Fig 9b is shown at a higher magnification (X 7) in Fig 9c. The conical protrusions formed on the high purity iron after

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On the Behaviour of Pure and Commercial-Grade Iron during  
Deformation under the Conditions of Cyclic Temperature Fluctuations

200 temperature fluctuations are shown in Fig 10a (X 22); microphotographs (X 100 and X 200) of the conical protrusion, marked A in Fig 10, are reproduced in Figs 10b and c, respectively, and show clearly the polycrystalline character of these growths whose formation had also been observed by Cizron and Lacombe (Ref 10), although these workers considered them to be polygonized single crystals. The experimental results reported in the present paper prove that small alloying additions markedly improve the strength of iron strained under the conditions of cyclic temperature variations. They show, also, that an increase in the alloying additions content lowers considerably the temperature of the minimum strength.

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There are 10 figures, 1 table and 10 references, of which 4 are Soviet, 4 English, 1 French and 1 Czechoslovak.

SUBMITTED: July 17, 1959

SIMEONOVA, Natal'ya, K.

Effect of transverse acceleration on the course of some pathological processes. Acta physiol. acad. sci. Hung. 26 no.4: 351-360 '65

1. Kafedra patologicheskoy fiziologii, Kievskogo meditsinskogo instituta Kiev, U.S.S.R.

PIRODA, Vasilko; PENEV, Nikolai

The bee pollen; composition and physiological effect. Priroda  
Bulg 13 n. 4:101-102. 61-Ag '64.

1. Institute of Nutrition of the Bulgarian Academy of Sciences.

SIMONOVA, Zolharina

Solomon (in caps); Given Names

Country: Bulgaria

Academic Degrees: not indicated

Affiliation: not indicated

Source: Sofia, Biologiya i Khimiya, No 1, 1961, pp 27-30

Data: "Methodical Notes on the 7th Class (7th Grade ) Subject  
"Halogen Group"



L 26379-65 EWO(j)/EWT(m)  
ACCESSION NR: AT4049962

Z/2511/61/000/001/0385/0391

AUTHOR: Simerda, J. (Shimerda, I.); Hekrdle, J. (Ekrdle, Ya.) 19 7 6 B+1

TITLE: Rapid and accurate determination of safe working conditions when working with radioisotopes emitting gamma radiation

SOURCE: Prague. Ceske vysoke uceni technicke. Prace. Ser. 6, no. 1, pt. 2, 1961, 385-391

TOPIC TAGS: radiation protection, radiation dosimetry, gamma radiation, radioisotope, slide rule

ABSTRACT: The article describes a method which makes it possible to considerably shorten the time required for making all the calculations required for determining the permissible working conditions for personnel working with radioisotopes. The method is quick and reliable and sufficiently accurate in most cases. In the discussion the authors limit themselves to gamma radiation. The calculations were made with the aid of a specially constructed slide rule. Practical experience acquired in using the slide rule at the Ustav Jaderneho vyzkumu CSAV (Institute of Nuclear Research Czechoslovak AS) has shown that such calculation is considerably more rapid and sufficiently accurate, and that it is possible to solve all cases

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ACCESSION NR: AT4049962

encountered in practice. The possibility of error, principally in the determination of the series, is minimal, and inaccuracy in calculation is caused only by inaccuracy in setting and reading off the values. Detailed instructions for using the slide rule are given, along with some practical examples of calculation. Orig. art. has: 2 figures and 11 formulas.

ASSOCIATION: Ustav jaderného výzkumu CSAV (Institute of Nuclear Research, Czechoslovak AS)

SUBMITTED: 00

ENCL: 00

SUB CODE: NP, G0

NO REF SOV: 002

OTHER: 002

Card 2/2

SIMEFITSKIY, B.P. (Moskva)

Vascular neoplasms of the spinal cord. Vop. neirokhir. 26  
no.5:20-22 S-0'62 (MIRA 17:4)

1. Nauchno-issledovatel'skiy ordena Trudovogo Krasnogo Znameni  
Institut neyrokhirurgii imeni akademika N.N. Burdenko AMN  
SSSR.

"Crystal Structure of Tetrammine Copper sulfate  $Cu(NH_3)_4SO_4 \cdot H_2O$ ." p. 250,  
(CHEMICKO-FYZIKALNY ČASOPIS PRO FYZIKU, Vol. 4, No. 3, June 1954, Praha, Czechoslovakia)

30: Monthly List of East European Accessions, (EEAL), LC, Vol. 4  
No. 5, May 1955, Uncl.

(4) The crystal structure of tetramminecopper sulfate,  $\text{Cu}(\text{NH}_3)_4\text{SO}_4 \cdot \text{H}_2\text{O}$ . Marie Bimerka (Czech. Acad. Sci., Prague). *Czech. J. Phys.* 4 (No. 3) 277-88 (1954). — The structure was detd. from  $hkl$  and  $hkl$  Weissberg patterns made with  $\text{Cu K}\alpha$  radiation. The space group is  $P4mm-D_{2h}$  with  $a = 12.12$ ,  $b = 10.60$ ,  $c = 7.07$  Å. Fourier refinement to  $R = 0.25$  and  $0.15$ , resp., for the 2 zones gave these special position and at. coordinates  $x, y, z$ : Cu (c), 0.243, 0.001,  $1/2$ ; S (c) 0.115, 0.249,  $1/2$ ; O<sub>1</sub> (d), 0.072, 0.310, 0.571; O<sub>2</sub> (c) 0.073, 0.115,  $1/2$ ; O<sub>3</sub> (c), 0.267, 0.218,  $1/2$ ; NH<sub>1</sub> (1) (d), 0.357, 0.434, 0.041; NH<sub>2</sub> (1) (d), 0.345, 0.070, 0.450; H<sub>2</sub>O (c), 0.170, 0.207, 0.250. The Cu-N coordination is square coplanar with covalent bonds averaging 2.05 Å. in length. P. Ordway

18  
7/51

SMERKA, M.

SMERKA, M. Statistical method for determination of the signs of structural factors. p. 175.

Vol. 5, no. 2, Mar. 1955  
ČESKOSLOVENSKÝ ČASOPIS PRO FYZIKU  
SCIENCE  
Czechoslovakia (Prague)

So: East European Accessions, Vol. 5, no. 5, May 1956

S. MERSKIL, Marie

4

*Spencer* A statistical method for the determination of the signs of structure factors. Marie Simerská (Czech. Acad. Sci., Prague). ~~Czechoslovakian~~ ~~in English~~. The sign of structure factors used in detg. crystal structures can be called from the expression  $\prod_{k=1}^m U_k = \sum_{j=1}^N u_j^m$ , where  $U$  is the unitary structure factor (cf. Harker and Kasper, C.A. 42, 5775a),  $u$  is the fraction of the electrons in the unit cell that correspond to the  $j$ th atom, and  $N$  is the no. of atoms per cell. The method was applied to the known structure of  $\alpha$ -Se and metaboric acid. I. B. Schragar

1  
Part 4  
Bowl

1. The first part of the document is a list of the names of the persons who were present at the meeting. The names are listed in alphabetical order.

2. The second part of the document is a list of the names of the persons who were present at the meeting. The names are listed in alphabetical order.

3. The third part of the document is a list of the names of the persons who were present at the meeting. The names are listed in alphabetical order.

4. The fourth part of the document is a list of the names of the persons who were present at the meeting. The names are listed in alphabetical order.

CZECHOSLOVAKIA/Solid State Physics - Structural Crystallography E-4

Abs Jour : Ref Zhur - Fizika, No 7, 1958, No 15535

Author : Toman Karel, Sinierska Marie

Inst : Not Given

Title : Defocusing of the Schulz Diffractometer.

Orig Pub : Ceskosl. casop. fys., 1957, 7, No 3, 255-260

Abstract : See Abstract 15534

Card : 1/1

CZECHOSLOVAKI./Solid State Physics - Structural Crystallography E-4

Abs Jour : Ref Zhur - Fizika, No 7, 1958, No 15534

Author : Toman Karel, Simerska Marie

Inst : Institute of Technical Physics, Czechoslovak Academy of Sciences, Prague

Title : Defocusing of the Schulz Diffractometer.

Orig Pub : Chekhosl. fiz. zh., 1957, 7, No 3, 351-358

Abstract : For a quantitative determination of the texture, one constructs the polar figures in the function  $P_{hkl}(\gamma, \varphi) \sin \gamma d_p d_s$ , which determines the probability of the fact that the normal to the plane (hkl) in a polycrystalline specimen passes through an element of surface  $\sin \gamma d_p d_s$  on the projection sphere. When the specimen is inclined at different angles  $\gamma$ , in the Schulz diffractometer method (Schulz L.G., Journal of Applied Physics, 1949, 20, 1030),  $P_{hkl}(\gamma, \varphi)$  is not determined by the maximum intensity of the diffraction profile, owing to defocusing. It is necessary to introduce a defocusing factor  $D(\gamma)$ , which equals for a specimen without

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CZECHOSLOVAKIA/Solid State Physics - Structural Crystallography E-4

Abs Jour : Ref Zhur - Fizika, No 7, 1958, No 15534

texture  $I_0^{\max}/I_j^{\max}$ , where  $I_0^{\max}$  and  $I_j^{\max}$  are the minimum intensities for the case  $\gamma = 0$  and  $\gamma \neq 0$ . For a specimen with a texture, this expression for  $D(\gamma)$  is incorrect. It is shown that  $D(\gamma)$  depends on the form of the basic diffraction profile of  $I_0$ , and consequently on the linear coefficient of absorption. Therefore, for correction purposes, one cannot use the values of  $D(\gamma)$ , measured for a specimen without texture, made of a powder of the investigated material and a binding substance. An equation is derived for the calculation of the defocusing factor for a specimen with texture, in which account is taken of the form of the basic profile ( $\gamma \neq 0$ ), the distribution of intensity of the primary beam, the height of the primary beam, and the width of the entrance slot of the counter. An experimental verification of the equation is made. The results of the measurements are in good agreement with the calculated data.

Card : 2/2

CZECHOSLOVAKIA/Solid State Physics - Mechanical Properties

E-10

Zhs Jour : Roz Zhar - Fizika, No 5, 1959, No 10686

Author : Toman Karel, Simerska Marie

Inst : -

Title : Texture of Deformation of Tin. I. Texture of Compression Deformation.

Orig Pub : Czechosl. casop. fys., 1957, 7, No 6, 723-726

Abstract : No abstract

Card : 1/1

Distr: E2c/4E2b(y)  
 Deformation texture of  $\beta$ -tin. I. Compression texture.  
 Karel Toman and Marie Simeraká (Inst. Tech. Phys.,  
 Prague). *Czechoslov. J. Phys.* 100(1978) (in English).  
 —The compression texture was measured of  $\beta$ -tin, produced  
 by compressing the samples at 20, -80, and -180°.  
 Measurement was carried out by the reflection method on a  
 Schulz diffractometer by measuring the pole figures of the  
 (200) and (101) planes. The results of the measurements  
 show the produced texture to be considerably dependent on  
 temp. II. Rolling texture. *Ibid.* 101-7. —The rolling  
 texture was measured of  $\beta$ -tin which is produced by roll-  
 ing the sample at 20° and in the temp. intervals -80 ~  
 -60° and -180 ~ -110°. III. Derivation of texture from  
 elements of plastic deformation? *Ibid.* 233-45. —The tex-  
 tures derived theoretically were compared with the com-  
 pression and rolling textures measured in  $\beta$ -tin. The de-  
 pendence of the texture produced on temp. of deformation  
 is explained.

Harry C. Allen, Jr.

Czechoslovakia/Solid State Physics - Mechanical Properties

E-10

Abstr Jour : Ref Zhur - Fizika, No 2, 1959, No 3363

Author : Toman Karel, Siderska Marie

Inst : -

Title : The Deformation Texture of  $\beta$  Tin. II. Rolling Texture

Orig Pub : Czechosl. fiz. zh., 1958, 2, No 1, 101-107

Abstract : No abstract

Card : 1/1

CZECHOSLOVAKIA/Solid State Physics - Mechanical Properties.

E.

Abs Jour : Ref Zhur - Fizika, No 7, 1959, 15488

Author : Toman, Karel; Sinierska, Marie

Inst : Institute for Technical Physics, Academy of Sciences,  
Prague Czechoslovakia

Title : The Deformation Texture of Beta Tin. II. Texture Formed  
During Rolling

Orig Pub : Ceskosl. casop. fys., 1958, 8, No 2, 138-193

Abstract : The rolling texture was measured in specimens of beta tin,  
subjected to rolling at three different temperatures.  
The measurements were carried out at reduced temperature,  
so as to exclude the possibility of recrystallization.  
The surface texture of the specimen was measured, and af-  
ter etching also the internal etching (at reduced tempera-  
ture). The polar figures of the (200) and (101) planes

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CZECHOSLOVAKIA/Solid State Physics - Mechanical Properties.

E.

Abs Jour : Ref Zhur - Fizika, No 7, 1959, 15483

were measured.

For Part I see Ref Zhur Fizika, 1959, No 5, 10696.

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CZECHOSLOVAKIA/Solid State Physics - Mechanical Properties.

E.

Abstr Jour : Ref Zhur - Fizika, No 7, 1959, 15439

Author : Tokan, Karel, Simerska, Marie

Inst : -

Title : The Deformation Texture of Beta Tin. III. Derivation of Texture Elements of Plastic Deformation

Orig Pub : Ceskosl. casop. fys., 1958, 8, No 2, 194-205

Abstract : Reorientation of beta tin in plastic deformation was established for different slip systems. The determination was made for both known groups of the slip systems both in tension and under pressure. It was found that the deformation texture, determined on the basis of the Obinata and Schmid group of slip systems (Obinata, J. Schmid, E., Z. Phys. 1933, 82, 227) is in good agreement with the textures measured at normal temperature. The author also derives the deformation texture arising when the deformation is not only the result of slip, but also of

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CZECHOSLOVAKIA/Solid State Physics - Mechanical Properties.

E.

Abs Jour : Ref Zhur - Fizika, No 7, 1959, 15439

twinning. It is found that the texture caused by deformation at low temperature corresponds to this case. It is concluded that the dependence of the deformation structure on the temperature is due to different deformation mechanisms at different temperatures. At normal temperature the deformation is produced mostly by slip, and at lower temperature the roll of twinning deformation increases.  
For Part II see Abstract 15488

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CZECHOSLOVAKIA/Solid State Physics - Mechanical Properties.

E.

Abs Jour : Ref Zhur - Fizika, No 7, 1959, 15490

Author : Toman, Karel; Simerska, Marie

Inst : -

Title : The Deformation Texture of Beta-Tin. III. Derivation of  
Texture From Elements of Plastic Deformation

Orig Pub : Chekhosl. fiz. zh., 1958, 3, No 2, 233-245

Abstract : No abstract.

Card: 1/1

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CZECH/37-59-1-16/26

AUTHORS: Marie Simerská, Vladimír Syneček

TITLE: A Contribution to the Semi-Focusing Method with a Plane Polycrystalline Sample

PERIODICAL: Československý Časopis Pro Fysiku, 1959, Nr 1,  
pp 102-104 + 1 plate

ABSTRACT: Fig 1 shows the semi-focusing method with a divergent beam of monochromatic X-rays for the case when the width of the effective area of the sample is small compared with the radius of the focusing circle and the radius of the camera. In this case only rays passing through points  $P_1$  and  $P_2$  are completely focused. The width of the diffraction lines for other angles for a given total divergence of the primary beam,  $2\delta$ , can be minimised according to Fig 2 (see also Eqs 1, 2, and 3). A similar calculation can be used for an oscillating sample. The absorption factor is, in this case, given by Eq (6). Fig 4 shows the absorption for various regions of oscillations  $\epsilon$ .  
There are 4 figures and 2 English references. ✓


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1/2

CZECH/37-59-1-16/26

A Contribution to the Semi-Focusing Method with a Plane  
Polycrystalline Sample

ASSOCIATION: Ústav technické fyziky ČSAV, Praha  
Card 2/2 (Institute of Technical Physics, CSAV, Prague)

SUBMITTED: September 9, 1958



CZECHOSLOVAKIA/Solid State Physics - Structural Crystallography. E

Abs Jour : Ref Zhur Fizika, No 4, 1960, 3659

Author : Simerska Marie, Synecek Vladimir

Inst : ~~University of Prague~~

Title : A Contribution to the Semi-Focusing Method with a Flat Polycrystalline Sample

Orig Pub : Czechoslo. fiz. zh., 1959, 9, No 3, 395-398

Abstract : See Abstract 8658.

Card 1/1

SIFERSKA, M.

Thermal vibrations of atoms in equilibrium Al-Ag solid solutions. Pts. 1-2. Chekhosl fiz zhurnal 13 no.10:737-753 '63.

1. Ustav fyziky pevných látek, Československá akademie věd, Praha.

GOLYNETS, Yu.F.; PONOMAREVA, L.I.; Prinsipali uchastiye: SIMETSKAYA, N.A.;  
SIMONENKOVA, R.A.

Estimating the reproducibility of the results of analyses  
of sulfur-containing substances. Trudy Kom.anal.khim. 13:  
137-138 '63. (MIRA 16:5)  
(Sulfur—Analysis) (Sulfur organic compounds)

SIMETSKIY, O.A., aspirant; MUTOVIN, V.I., doktor veter. nauk, nauchnyy  
rukovoditel' raboty

Erythromycin for treating cows with subclinical mastitis.  
Veterinariia 42 no.9:78-79 S '65.

(MIRA 18:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut  
veterinarnoy sanitarii.

USSR/Medicine, Veterinary - Infectious Diseases Sep 52

"Treatment of Erysipelas of Swine With Red Streptocide Solution," Simetskly, Vet Physician, Melitopol Hosp, Ukrainian SSR

"Veterinariya" Vol XXIX, No 9, p 57

A 5% soln of sol streptocide was injected intramuscularly into swine that had erysipelas, at the rate of 5 cc every 4-5 hrs. The treatment consists of 5 injections. The whole treatment is accomplished

225T28

in 24 hrs. Relapses may occur if the number of injections is reduced. The author cured 27 swine using this method of treatment.

225T28

1. Veterinary (Vet Physician)

SIMETSKIY, O. A. (Veterinary Surgeon, Melitopol' District Veterinary Hospital,  
Zaporozhsk Oblast')

"Utilization of polymyxin in animal diseases"

Veterinariya, vol. 39, no. 5, May 1962 p. 77

SIMETSKIY, O.A., veterinarnyy vrach

Use of polymyxin in animal diseases. Veterinariia 39 no.5:77-78  
My '62 (MIRA 18:1)

1. Melitopol'skaya rayonnaya veterinarnaya lechebnitsa, Zaporozh-  
skoy oblasti.

L 9669-66 ENT(1)/EWA(h)

ACC NR: AP5026551

SOURCE CODE: UR/0286/65/000/019/0099/0100

AUTHOR: Simetskiy, Yu. A.

ORG: none

TITLE: A dynamic trigger. Class 42, No. 175313

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 19, 1965, 99-100

TOPIC TAGS: trigger circuit, dynamic response, stability condition, semiconductor, triode

ABSTRACT: This Author Certificate presents a dynamic trigger constructed with a single semiconductor triode of, for example, a p-n-p type, and two ferrite cores, each with four windings. The design is intended to increase the operation stability and to simplify the device (see Fig. 1). One end of the first winding of one of the

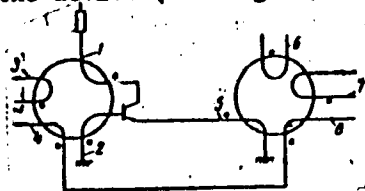


Fig. 1. 1-4 - First core windings; 5-8 - second core windings.

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UDC: 681.142.621.374.3

L 9669-66

ACC NR: AP5026551

cores is connected to the trigger collector, and the second end of the winding is connected to the "minus" power supply through a resistor. One end of the second winding is connected to "ground," and the other end of the second winding to the triode base. The third winding receives cycle pulses. One end of the first winding of the second core is connected to the triode emitter, and the other end of the first winding of the second core is connected to "ground." The second winding receives cycle pulses. The third winding is fed triggering pulses. The fourth windings on both cores are joined in a series and are connected to the cancellation pulse source. Orig. art. has: 1 figure.

SUB CODE: 09/

SUBM DATE: 15Feb63

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Card 2/2

YUGOSLAVIA/Chemical Technology: Chemical Products and Their Appli- H-6  
cation. Safety and Sanitation

Abs Jour : Ref Zhur - Khim., No 24, 1958, No 62165

Author : Sineunovich D.

Inst : ~~\_\_\_\_\_~~

Title : Determination of Mean Temperature of Heat Radiation by  
Means of a Globe-Thermometer and Nomograms

Orig Pub : Glasnik Khig. in-ta, 1957, 6, No 3-4, 55-59

Abstract : The determination of heat radiation in the factory quarters  
is conducted with the aid of a globe-thermometer. For  
the rapid calculation of an average temperature of radiation  
a nomogram is being prepared. -- G. Lyudskirskaya

Card : 1/1

SIMEUNOVIC, D.M. (Beograd)

Solving Riccati's differential equation by means of the quadrature.  
Zbornik rad Mat inst SAN 69:109-114 '60. (EBAI 10:8)  
(Differential equations)

ST. NEUVIS, P. 8

"Refining technical terms in forestry." (P. 262) Vol. 77, no. 6, June 1953.

SO: East European Accessions List, Vol 3, No 3, Aug 1954